



Loveland, CO 80537-0599

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,772 03/07/2002 Mark Melvin Butterworth 7590 11/28/2005		Mark Melvin Butterworth	10011181-1	2557
		EXAMINER		
AGILENT TECHNOLOGIES, INC.			PERUNGAVOOR, SATHYANARAYA V	
Legal Departme	ent, DL429			
Intellectual Property Administration			ART UNIT	PAPER NUMBER
P.O. Box 7599			2625	

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)		
Office Action Summary		10/092,772	BUTTERWORTH, MARK MELVIN		
		Examiner	Art Unit		
		Sath V. Perungavoor	2625		
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address		
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING Donsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period or the to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	L. nely filed the mailing date of this communication.		
Status					
2a)⊠	Responsive to communication(s) filed on 30 Since this application is in condition for alloware closed in accordance with the practice under Expression in the practice of the condition for alloware closed in accordance with the practice under Expression in the condition for alloware closed in accordance with the practice under Expression in the condition in the	action is non-final.			
Dispositi	on of Claims				
5) ☐ 6) ☑ 7) ☐ 8) ☐ Applicati 9) ☐ 10) ☐	Claim(s) 1-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdray. Claim(s) is/are allowed. Claim(s) 1-17 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examine. The drawing(s) filed on is/are: a) according according to the product of the correct of the product of the prod	wn from consideration. r election requirement. r. epted or b) objected to by the Edrawing(s) be held in abeyance. Seetion is required if the drawing(s) is objected.	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority u	ınder 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
2) Notice	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:			

DETAILED ACTION

Applicant(s) Response to Official Action

[1] The response filed on September 30, 2005 has been entered and made of record.

Response to Arguments

[2] Presented arguments have been fully considered but are held unpersuasive.

Examiner's response to the presented arguments follows below.

Claim Rejections - 35 USC § 102

Summary of Arguments:

Applicant argues that Nakabayshi does not disclose "receiving direction information indicative of a direction of movement between the image capture device and the document during the capture of the plurality of digital images". Accordingly, applicant requests the withdrawal of the rejection.

Examiner's Response:

Examiner respectfully disagrees. Examiner directs the applicant to column 4, lines 45-48 and 54-58 of Nakabayshi where this limitation is glaringly shown. Nakabayshi discloses that the order (i.e. direction) of the scan is preserved and top, bottom, left and right of each scan is determined. Here top, bottom, left and right indicate the direction of movement. Accordingly, Examiner maintains the rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

[3] Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakabayshi [US 5,675,672].

Regarding claim 1, Nakabayshi meets all the claim limitations, as follows:

A method of generating an electronic text file from a paper-based document that includes a plurality of characters, the method comprising [Figure 3]: capturing a plurality of partially overlapping digital images of the document with an image capture device [56 and 60 on Figure 3, Column 5 Lines 19-39: First file (first image) and second file (second image) are overlapping.]; receiving direction information indicative of a direction of movement between the image capture device and the document during the capture of the plurality of digital images [Column 4 Lines 45-48; Column 6 Lines 53-54]; performing optical character recognition on each one of the plurality of captured digital images, and thereby generating a corresponding plurality of electronic text files, each one of the electronic text files including a portion of the plurality of characters in the document [58 and 62 on Figure 3]; comparing the plurality of electronic text files with one another to identify characters that are in common between the electronic text files [Column 5 Lines 36-39]; and combining the plurality of electronic text files into a combined text file based on the comparison, wherein the combined text file includes the plurality of characters in the document [Column 5 Lines 57-60].

Regarding claim 2, Nakabayshi meets all the claim limitations, as follows:

The method of claim 1, and further comprising: storing order information representing the order in which the plurality of digital images were captured [Column 4 Lines 45-48].

Regarding claim 3, Nakabayshi meets all the claim limitations, as follows:

The method of claim 2, wherein the comparison of the plurality of text files is based on the stored order information [Column 4 Lines 54-58].

Regarding claim 4, Nakabayshi meets all the claim limitations, as follows:

The method of claim 1, wherein the plurality of digital images are captured with a digital camera, the method further comprising: providing the direction information with a user input device of the digital camera [Column 4 Lines 45-48, Column 6 Lines 53-54].

Regarding claim 5, Nakabayshi meets all the claim limitations, as follows:

The method of claim 1, wherein the plurality of digital images are captured with a digital camera, the method further comprising: automatically detecting the direction information [Column 4 Lines 45-48, Column 6 Lines 53-54:

Disclosed method stores scan data in the order received and this is performed automatically without manual intervention. Resulting order is the direction.].

Regarding claim 6, Nakabayshi meets all the claim limitations, as follows:

The method of claim 1, wherein the plurality of digital images are captured automatically at a predefined time interval [Column 6 Lines 53-54: The scanner meets this limitation.].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- [4]. Claims 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakabayshi in view of Honma [US 6,304,313].

Regarding claim 7, Nakabayshi discloses the claim limitations, as follows:

an image sensor for generating a plurality of partially overlapping digital images based on optical images directed onto the image sensor by the lens [120 on Figure 7, 56 and 60 on Figure 3, Column 5 Lines 19-39: First file (first image) and second file (second image) are overlapping.], and a controller coupled to the image sensor and configured to receive direction information indicative of a direction of movement of the digital camera during capture of the plurality of digital images, and perform optical character recognition on the plurality of digital images, and thereby generate an electronic text file for each one of the plurality of digital images, the electronic text file for each digital image including text appearing in the digital image, the controller configured

to identify overlapping text between electronic text files and stitch the text in the plurality of text files together based on the identified overlapping text [110 on Figure 7, 58 and 62 on Figure 3, Column 5 Lines 36-39, Column 5 Lines 57-60; Column 4 Lines 43-48; Column 6 Line 53].

Nakabayshi does not explicitly disclose the following claim limitations:

A digital camera comprising: a lens;

However, in the same field of endeavor Honma discloses the deficient claim limitations, as follows:

A digital camera comprising: a lens [Title, Column 13 Lines 20-21]; It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Nakabayshi with Honma to use a digital camera with lens for document stitching, since digital cameras provide small-sized convenience not present in desktop scanners [Honma Column 1 Lines 26-30].

Regarding claim 8, Nakabayshi meets all the claim limitations, as follows:

The digital camera of claim 7, and further comprising: a memory for storing order information representing the order in which the plurality of digital images were captured [112 and 114 on Figure 7, Column 4 Lines 45-48].

Regarding claim 9, Nakabayshi meets all the claim limitations, as follows:

The digital camera of claim 7, and further comprising: a user input device for inputting the direction information [Column 4 Lines 43-48; Column 6 Line 53].

Regarding claim 10, Nakabayshi meets all the claim limitations, as follows:

The digital camera of claim 7, and further comprising: a motion detector for automatically detecting the direction [Column 4 Lines 43-48: Disclosed method stores scan data in the order received and this is performed automatically without manual intervention. Resulting order is the direction.].

Regarding claim 11, Nakabayshi meets all the claim limitations, as follows:

The digital camera of claim 7, wherein the controller is configured to cause the plurality of digital images to be captured automatically at a predefined time interval [Column 6 Lines 53-54].

Regarding claim 12, Nakabayshi meets the claim limitations, as follows:

a display screen for displaying images captured with the digital camera [116 on Figure 7];

based on at least in part on direction information indicative of a direction of movement of the digital camera while the digital images are being captured [Column 4 Lines 60-65].

All residual limitations of this claim is set forth and rejected as per discussion for claim 7.

Regarding claim 13, Nakabayshi and Honma meet the claim limitations, as follows:

The electronic device of claim 12, wherein the electronic device is one of a cellular telephone, a personal digital assistant device, and a laptop computer [A laptop computer is notoriously well-known. OFFICIAL NOTICE.]

Regarding claims 14-17 all claimed limitations are set forth and rejected as per discussion for claims 8-11.

Conclusion

[5] THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

[6] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Sath V. Perungavoor whose telephone number is (571) 272-7455. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Bhavesh M. Mehta whose telephone number is (571) 272-7453, can be reached on Monday to Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dated: November 17, 2005

By:

Sath V. Perungavoor Group Art Unit: 2625

Telephone: (571) 272-7455

KANJIBHAI PATEL PRIMARY EXAMINER